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09/810,992	03/16/2001	William Philip Shaouy	RSW920010028US1	7307

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EXAMINER
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KE, PENG

ART UNIT	PAPER NUMBER
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2174

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/810,992

Applicant(s)

SHAOUY ET AL.

Examiner

Peng Ke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/12/07 has been entered.

Claims 21-40 are pending in this application. Claims 21, 29, and 35 are independent claims. In the Amendment, filed on 6/12/07, claims 21-40 were added and claims 1-20 were cancelled.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As set forth in MPEP 2106 (II) (A):

The claimed invention as a whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of “real world” value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some “real world” value. However, the mere fact that the claim may satisfy the utility requirement

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of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application

As set forth in MPEP 2106 (IV) (B) (1):

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract ideas, *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, *Schrader*, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*. *Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

As set forth in MPEP 2106 (IV)(B)(1)(a):

Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material *per se* from claims that define statutory inventions.

Products may be either machines, manufactures, or compositions of matter.

A *machine* is "a concrete thing, consisting of parts or of certain devices and combinations of devices." *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 570 (1863).

If a claim defines a useful machine or manufacture by identifying the physical structure of the machine or manufacture in terms of its hardware or hardware and software combination, it defines a statutory product. See, e.g., *Lowry*, 32 F.3d at 1583, 32 USPQ2d at 1034-35; *Warmerdam*, 33 F.3d at 1361-62, 31 USPQ2d at 1760.

Office personnel must treat each claim as a whole. The mere fact that a hardware element is recited in a claim does not necessarily limit the claim to a specific machine or manufacture. Cf. *In re Iwahashi*, 888 F.2d 1370, 1374-75, 12 USPQ2d 1908, 191 1-12 (Fed. Cir. 1989), cited with approval in *Alappat*, 33 F.3d at 1544 n.24, 31 USPQ2d at 1558 n.24.

The claims 29-34 claimed an invention that is directed to non-statutory subject matter. Claim

29 claims an apparatus that is computer programs that is physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such

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claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21, 24, 26, 28-30, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki US Patent 6,313,921 and Forecast Pro.

A per claim 21, Kadowaki teaches a method for tailoring information to characteristics of an information user, comprising:

passing a request object containing at least one profile element to an arbiter; (see Kadowaki; column 18, lines 38-61; The examiner interprets the printer controller as an arbiter because it directs personalization information to a personalization server);

actively selecting a personalization engine from a plurality of personalization engines by the arbiter (see Kadowaki, column 15, lines 41-45; the printer controller, which is a part of the a personalizing server, correlates the user ID information with the personalizing information from a plurality of the personalizing information);

accessing a content database to retrieve a personalized content object identified by the personalization engine selected by the arbiter; (see Kadowaki, column 18, lines 63-67 and column 19, lines 1; it is inherent that the personalization server must store and manage the personalized information in a database if it is to extract said information for a particular user) and

passing with the arbiter the personalized content object to an application program, (see Kadowaki, column 19, lines 1-3; The personal server and the controller, which are application programs, passes the user personalization information to each other)

wherein the arbiter comprises an expert system that is one of rule based, model based, and knowledge based. (see Kadowaki, column 18, lines 39-46; the examiner interprets acquiring the network address of a personalization server as a part of user ID information as performing rule-base analysis)

Kadowaki does not teach actively selecting, by analysis of the at least one profile element, a personalization engine from a plurality of personalization engines by the arbiter, the arbiter refining and altering a selection based on a number and type of the profile element.

Forecast pro teaches actively selecting, by analysis of the at least one profile element, a personalization engine from a plurality of personalization engines by the arbiter (see item 1: "The built-in expert selection system analyzes your data, selects the appropriate forecasting technique, builds the model and calculates the forecasts..."),

the arbiter refining and altering a selection based on a number and type of the profile element (see item 2: "Simple Methods - For very short and extremely volatile data, Forecast Pro includes moving average models"; see item 3: "Low Volume Models Croston's Intermittent Demand model and discrete data models are provided to accommodate low volume and "sparse" data..."; the Examiner interprets "very short" and "low volume" data as a number of the profile element, and "extremely volatile data" and "sparse" as a type of the profile element).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Forecast Pro with the method of Kadowaki in order to provide more relevant results to a user.

As per claim 24, Kadowaki and Forecast Pro teach the method of claim 21. Kadowaki further teaches the method comprising sending the request object over a communication network. (see Kadowaki, column 2, lines 25-30; The requested image object is sent from the server to the client through the communication network)

As per claim 26, Kadowaki and Forecast Pro teach the method of claim 21. Kadowaki further teaches the method comprising:

accessing a profile database that stores profile elements associated with the request object; (see Kadowaki, column 19, lines 51-67; It is inherent that the personalization information is stored in a database)

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retrieving from the profile database at least one profile element associated with the request object; (see Kadowaki, column 18, lines 63-column 19, lines 11; The server and the controller passed and retrieved user profile based on user id ) and  
and;

including in the request object the at least one profile element retrieved from the profile database. (see Kadowaki, column 18, lines 38 -- 67 and column 19, lines 1 - 11; it is inherent that the user ID sent in the request object its part of the user profile retrieved by the personalization server).

As per claim 28, Kadowaki and Forecast Pro teach the method of claim 21. Kadowaki further teaches the method comprising the arbiter analyzing at least one of a date of the request object, a user identity, a user shopping history, and a user usage path. (see Kadowaki, column 18, lines 39 – 46; User id is a user identity)

As per claim 29, Kadowaki teaches apparatus for tailoring information to characteristics of an information user, the apparatus comprising:

an arbiter for accepting and analyzing a request object; (see Kadowaki, column 18, lines 38 - 61; the examiner interprets the printer controller as an arbiter because it directs personalization information to a personalization server)



a plurality of personalization engines for selecting at least one personalized content object from a content database; (see Kadowaki, column 15, lines 41-45; the printer controller, which is a part of the a personalizing server, correlates the user ID information with the personalizing information from a plurality of the personalizing information)

the arbiter selecting a personalization engine from the plurality of personalization engines, (see Kadowaki, column 18, lines 38 – 44; The server and the controller select user profile from a plurality of the profiles )and the selected personalization engine selects the at least one personalization content object from the content database; (see Kadowaki, column 18, lines 62 - 67, and column 19, lines 1 – 11; The server and the controller passed and retrieved user profile based on user id).

the arbiter passing the personalized content object to an application program, (see Kadowaki, column 19, lines 1-3; The personal server and the controller, which are application programs, passes the user personalization information to each other)

wherein the arbiter comprises an expert system that is one of rule based, model based, and knowledge based. (see Kadowaki, column 18, lines 39-46; the examiner interprets acquiring the network address of a personalization server as a part of user ID information as performing rule-base analysis)

Kadowaki does not teach the arbiter refining and altering a selection based on a number and type of at least one profile element wherein the arbiter selects a personalization engine from the plurality of personalization engines by analysis of the at least one profile element.

Forecast pro teaches the arbiter refining and altering a selection based on a number and type of at least one profile element contained in the request object wherein the arbiter selects a personalization engine from the plurality of personalization engines by analysis of the at least one profile element ("The built-in expert selection system analyzes your data, selects the appropriate forecasting technique, builds the model and calculates the forecasts"; "Simple Methods - For very short and extremely volatile data, Forecast Pro includes moving average models"; "Low Volume Models - Croston's Intermittent Demand model and discrete data models are provided to accommodate low volume and 'sparse' data... "; the Examiner interprets the "expert system" as an arbiter, user data as at least one profile element, "very short" and "low volume" data as a number of the profile element, and "extremely volatile data" and "sparse" as a type of the profile element).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Forecast Pro with the method of Kadowaki in order to provide more relevant results to a user.

As per claim 30, Kadowaki and Forecast Pro teach the apparatus of claim 29. Kadowaki further teaches the apparatus comprising output logic for passing the at least one personalization content object to an application program over a communication network. (see Kadowaki column

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2, lines 25 - 30 and column 19, lines 1 - 3; it is inherent that the printer controller is an application program)

As per claim 33, Kadowaki and Forecast Pro teach the apparatus of claim 29. Kadowaki further teaches wherein the arbiter is configured to receive a request object from a user (see Kadowaki, column 3, lines 5 – 6: Server and the controller receives user's request for image object) and a profile element from a profile database. (see Kadowaki, column 19, lines 1 – 3; User profiles is selected from a plurality of profiles).

As per claim 34, which is dependent on claim 29, it is rejected under the same scope as claim 28. Supra.

Claims 22, 31, 32 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki US Patent 6,313,921, Forecast Pro, in view of Jacobi US Patent 6,064,980.

As per claim 22, Kadowaki and Forecast Pro teach the method of claim 21. Kadowaki and Forecast Pro fail to teach the method comprising using the arbiter for on-line shopping.

Jacobi teaches using the arbiter for on-line shopping. (see Jacobi column 3, lines 15-35 and column 7, lines 50-56; allowing user to order book over the internet from an online catalog)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Jacobi with the method of Kadowaki and Forecast Pro in order to provide online shipping recommendations to the user.

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As per claim 31, Kadowaki, Forecast Pro and Jacobi teach the apparatus of claim 30. Jacobi further teaches wherein the communication network is the Internet (see Jacobi; '980, column 2, lines 55-65; ordering item through an online catalog, wherein the communication network is inherently a internet.)

As per claim 32, Kadowaki, Forecast Pro and Jacobi teach the apparatus of claim 30. Jacobi further teaches wherein the application program is a web browser. (see Jacobi, column 4, lines 25-35; HTML-compliant browser program is a web browser)

As per claim 35, Kadowaki teaches a method for tailoring information delivered to a user, comprising:

wherein the arbiter comprises an expert system that is one of rule based, model based, and knowledge based. (see Kadowaki, column 18, lines 39-46; the examiner interprets acquiring the network address of a personalization server as a part of user ID information as performing rule-base analysis)

However, Kadowaki fails to teach  
selecting with an arbiter a personalization engine by analysis of at least one profile element;

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selecting with the personalization engine a personalized content object to tailor information provided to the user; and

Forecast Pro teaches

selecting with an arbiter a personalization engine by analysis of at least one profile element; selecting with the personalization engine a personalized content object to tailor information provided to the user; (see item 1: "The built-in expert selection system analyzes your data, selects the appropriate forecasting technique, builds the model and calculates the forecasts"; the Examiner interprets the "expert system" as an arbiter, user data as at least one profile element) and

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Forecast Pro with the method of Kadowaki in order to provide more relevant results to a user.

However, both Kadowaki and Forecast Pro fail to teach using the arbiter for on-line shopping.

Jacobi teaches using the arbiter for on-line shopping. (see Jacobi column 3, lines 15-35 and column 7, lines 50-56; allowing user to order book over the internet from an online catalog)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Jacobi with the method of Kadowaki and Forecast Pro in order to provide online shipping recommendations to the user.

As per claim 36, Kadowaki, Forecast Pro and Jacobi teach the method of claim 35. Forecast Pro further teaches method comprising the arbiter receiving a request object from a user, and sending the selected personalized content object to the user's application program. (see item 1: "The built-in expert selection system analyzes your data, selects the appropriate forecasting technique, builds the model and calculates the forecasts"; and item 4: "A few more clicks and you've ... output your forecasts to a spreadsheet, ASCII file or ODBC compliant database")

As per claim 37, Kadowaki, Forecast Pro and Jacobi teach the method of claim 36. wherein the application program is a web browser. (see Jacobi, column 4, lines 25-35; HTML-compliant browser program is a web browser)

As per claim 38, Kadowaki, Forecast Pro and Jacobi teach the method of claim 35. Kadowaki further teaches method comprising the arbiter receiving a profile element (see Kadowaki, column 3, lines 5-6; Server and the controller receives user's request for image object) from a profile database. (see Kadowaki, column 19, lines 1-3 User profiles is selected from a plurality of profiles)

As per claim 39, Kadowaki, Forecast Pro and Jacobi teach the method of claim 35. Kadowaki further teaches the method comprising sending the request object over a communication network. (see Kadowaki, column 2, lines 25-30)

As per claim 40, Kadowaki, Forecast Pro and Jacobi teach the method of claim 39. Jacobi teaches wherein the communication network is the Internet. (see Jacobi; '980, column 2, lines 55-65; ordering item through an online catalog, wherein the communication network is inherently a internet.)

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki US Patent 6,313,921, Forecast Pro, further in view of Jacobi et al., U.S. Patent No. 6,064,980 and Tetzlaff, U.S. Patent No. 6,556,963.

As per claim 27, Kadowaki and Forecast Pro teach the method of claim 21. They fail to teach wherein the plurality of personalization engines comprises at least two personalization engines selected from the group consisting of a rule-based personalization engine, a predictive-modeling personalization engine, and a collaborative filtering personalization engine.

Jacobi et al. teaches a collaborative filtering engine (see Jacobi et al., column 2, lines 18 - 21; the examiner interprets the recommendation service as a personalization engine because it uses collaborative filtering using particular user information to recommend items to users).

Tetzlaff teaches a rule-based personalization engine (see Tetzlaff, column 2, lines 22 - 27; the examiner interprets the feedback generator as a personalization engine because it uses rule-based protocol to give feedback to a user depending on a particular user model).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the personalization engines as taught by Jacobi et al. and Tetzlaff with the method of Kadowaki and Forecast Pro in order to provide more flexible means of personalization.

Claims 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadowaki US Patent 6,313,921, Forecast Pro, further in view of Kurtzman, U.S. Patent No. 6,044,376.

As per claim 23, Kadowaki and Forecast Pro teach the method of claim 21. However, they fail to teach wherein the application program is a web browser.

Kurtzman teaches the method wherein the application program is a web browser. (see Kurtzman, column 3, lines 32 - 37, and column 3, lines 60 - 67; it is taught that the user communicates to the web server via a web browser, and it is inherent that when the personalized content is delivered to the user it is viewed via said web browser).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method taught by Kurtzman with the method taught by Kadowaki and Forecast Pro to provide a more sophisticated profiling technique for use in a web browser.



As per claim 25, Kadowaki and Forecast Pro teach the method of claim 24. They fail to teach wherein the communication network is the Internet.

Kurtzman teaches the method wherein the communication network is the internet. (see Kurtzman, column 3, lines 32-37, and (see Kurtzman,, column 3, lines 32 - 37, and column 3, lines 60 - 67). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method taught by Kurtzman with the method taught by Kadowaki and Forecast Pro to provide access to remote users of the system.

#### ***Response To Argument***

Applicant's arguments with respect to claims 21-40 have been considered but are deemed to be moot in view of the new grounds of rejection.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peng Ke whose telephone number is (571) 272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peng Ke, /Peng Ke/

Patent Examiner

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